

THE NORTH AND CENTRAL AMERICAN SPECIES
OF EURYPTERA AND A RELATED NEW GENUS
(COLEOPTERA, CERAMBYCIDAE)

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Euryptera is one of several related genera of diurnal flower and foliage visiting Lepturini which include species exhibiting lycid-like coloration and form. This resemblance is expressed in yellow, orange, or reddish dorsal integumental colors, often contrasted with black elytral or thoracic markings or both. There is a tendency toward flattened and apically expanded elytra, in some cases with the development of costae, basally modified antennae, and other specializations associated with lycid-like appearance among Cerambycidae. These features, involving as they do convergence in coloration and form among different species, have made identification from descriptions alone difficult or uncertain. The following key, based upon study of the types of most of the named species, is presented in the hope that it will aid in the identification of the described species and thus indirectly stimulate ecological and behavioral studies which will help explain their lycid-like appearance and clarify their status in relation to the theory of mimicry.

KEY TO THE DESCRIBED NORTH AND CENTRAL AMERICAN SPECIES OF
Euryptera

- 1 Elytra black or predominantly black 2
- Elytra yellowish to reddish, concolorous or with the suture in part or the apices black 7
- 2(1) Pronotum black or black with the sides fulvous 3
- Pronotum yellow or yellowish, also the head, thorax, scutellum, metasternum, and the anterior and middle femora; form moderately robust. 11.5 mm. Western Texas (Davis Mts.) *texana*
- 3(2) Elytra without well defined costae 4
- Elytra distinctly bicostate, the epipleura abruptly vertical. 9–11 mm. Mexico *costulata*
- 4(3) Pronotum gradually or feebly arcuately declivous to anterior margin; antennae with third to sixth segments unequal in length 5
- Pronotum elevated in front and steeply declivous to anterior mar-

- gin; antennae with third to sixth segments unequal in length. 9 mm. Mexico (Chihuahua) *batesi*
- 5(4) Elytra with punctures moderately coarse and well separated, surface wholly black or rarely brownish; pronotum usually black, rarely fulvous at sides 6
- Elytra with punctures small and dense, humeral area usually fulvous; pronotum nearly always broadly fulvous at sides. 9–11 mm. Southeastern United States to Central Mexico *lateralis*
- 6(5) Elytra dullish, asperate-punctate. 7–10 mm. Southern Arizona (Cochise Co.) and northern Mexico (Chihuahua) *chihuahuae*
- Elytra shining, not asperate-punctate. 6.5–10.5 mm. Southern Arizona (Chiricahua, Santa Catalina, Santa Rita, and Huachuca Mts.) *huachucae*
- 7(1) Elytra distinctly costate or longitudinally sulcate 8
- Elytra smooth, at most feebly or indistinctly costate or sulcate 9
- 8(7) Pronotum at base much narrower than elytra, black, evenly convex, shining and thinly pubescent; elytra elongate, reddish, delicate, finely costate. 14 mm. Mexico (Durango) *longipennis*
- Pronotum at base nearly as wide as elytra, densely pubescent, reddish with an elevated median black ridge; elytra with a flexuous longitudinal sulcus, uniformly reddish in the male, apical half black in the female. 11–15 mm. Mexico (Vera Cruz) to Panama *patricia*
- 9(7) Elytra moderately to strongly convex, less than three times as long as basal width 10
- Elytra elongate, flattened, more than three and one-half times as long as basal width, apices flaring slightly; median black line of pronotum continued along elytral suture where it becomes attenuated beyond middle, the surface otherwise golden orange. 11.5 mm. Panama *sericea*
- 10(9) Pronotum with median longitudinal black line 11
- Pronotum concolorous red or yellowish-brown 12
- 11(10) Median black line of pronotum wider than scutellum; posterior angles of pronotum acutely produced over humeri; elytral pubescence moderately long, suberect; elytra yellowish with apical half to one-third black in both sexes. 7.5–8 mm. Florida and Mexico (Hidalgo) *lateralis* var. *flavatra*
- Median black line of pronotum narrower than scutellum; posterior angles of pronotum not acutely produced over humeri; elytral pubescence moderately short, subdepressed; elytra concolorous yellowish in female, apical half black in male. 8–9 mm. Mexico (Vera Cruz, Hidalgo) *mimula*
- 12(10) Elytra concolorous red or yellowish-brown 13
- Elytra rufo-testaceous with apical one-fifth black; pronotum and elytra uniformly and regularly clothed with posteriorly directed recurved hairs; elytral apices obliquely truncate, outer angle denticiform; apical angles of abdomen spiniform. 10 mm. Panama (Canal Zone) *spinifera*
- 13(12) Head and ventral surface black; pronotum and elytra red 14

- Head red and yellowish-brown or brown; pronotum and elytra red or yellowish 15
- 14(13) Scutellum red; antennal tubercles, vertex and upper eye margins densely clothed with long appressed golden hairs; elytra without costae, not wider before apex, apices transversely sinuate-truncate, outer angle dentiform. 14 mm. Mexico (Morelos) *flammata*
- Scutellum black; antennal tubercles thinly clothed with erect black hairs; elytra feebly costate, flaring slightly before apex, apices rounded to outer angle which is not dentiform. 11 mm. Southern Arizona (Huachuca and Chiricahua Mts.) *cruenta*
- 15(13) Elytra shining, punctures finer than those of pronotum 16
- Elytra opaque, punctures larger than those of pronotum; reddish-brown, with eyes, antennae, apices of mandibles and femora, tibiae and tarsi, dark brown or black. 12.6 mm. Arizona (Santa Catalina Mts.) *sabinoensis*
- 16(15) Pronotum and elytra yellowish-brown 17
- Pronotum and elytra red; elytral apices broadly rounded from suture to external angle which is scarcely dentiform. 13 mm. Southern Arizona (Huachuca, Chiricahua and Pinaleno Mts.) *ignita*
- 17(16) Head short, distance between eye and base of mandible shorter than width of mandible at base 18
- Head elongate, distance between eye and base of mandible distinctly longer than width of mandible at base; elytral apices flexuose-truncate with a distinct tooth externally. 15 mm. Mexico (Guerrero) *unicolor*
- 18(17) Elytra with punctures very dense, giving a crenulate appearance to the surface. 11–12 mm. Western Texas (Davis Mts.) *texana* var.
- Elytra with punctures well separated. 12.5–14 mm. Southern Arizona (Huachuca and Santa Rita Mts.) *breviceps*

Euryptera texana Knull

Euryptera texana Knull, 1941, Ohio Jour. Sci., 41: 388.

Euryptera texanae Knull, 1954, Ohio Jour. Sci., 54: 129.

This species was described from a female from the Davis Mountains, Texas, July 3, 1940 (D. J. and J. N. Knull). The type specimen is black, with the head, thorax, scutellum, mesosternum and anterior and middle femora yellowish. The pronotum and elytra are both finely, densely punctate but the punctures of the latter are larger. However, Professor Knull informs me that he has since captured an entirely yellowish-brown example in the Davis Mountains and I have seen a similar specimen from Alpine, Texas.

Euryptera costulata Bates

Euryptera costulata Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5: 284.

This species is suggestive of *E. lateralis* (Olivier) but the elytra are distinctly bicostate, the epipleura abruptly vertical, and the apices separately rounded. It is known from Oaxaca, Jalapa, Juquila, and Cerro de Plumas, Mexico.

***Euryptera batesi* Linsley, new name**

Euryptera chihuahuae ♂ (?), Bates, 1885, *Biologia Centrali-Americana*, *Coleoptera*, 5: 285.

The male described by Bates represents a species distinct from *E. chihuahuae*. It resembles *E. lateralis* (Olivier) superficially, but in the same sex the two differ in the form of the antennae, which in *batesi* are more slender with the third to sixth segments subequal in length, and the form of the pronotum, which in *batesi* is abruptly elevated and convex in front. The type, from Pinos Altos, Chihuahua (Buchan-Hepburn) is in the British Museum (Natural History).

Euryptera lateralis (Olivier)

Leptura lateralis Olivier, 1795, *Entomologie*, 4 (73): 22, pl. 3, fig. 37.

Euryptera lateralis Leng, 1890, *Entom. Americana*, 6: 213; Bates, 1885, *Biologia Centrali-Americana*, *Coleoptera*, 5: 284; Hopping, 1937, *Nat. Mus. Canada*, *Bull.* 85: 27.

Leptura distans Germar, 1824, *Ins. Spec. Nov.*, p. 524.

Leptura cincta Haldeman, 1847, *Trans. Amer. Philos. Soc.*, (2) 10: 63.

Leptura obsoleta Haldeman, 1847, *Trans. Amer. Philos. Soc.*, (2) 10: 63.

Euryptera subintegra Casey, 1924, *Memoirs on the Coleoptera*, 11: 285.

This species has been taken most abundantly in southeastern United States and material at hand is from North Carolina, Alabama, and Mississippi. Mexican material has been seen from Vera Cruz [San Rafael, Jicaltepec (F. C. Bowditch)] and Tamaulipas [2 mi. N. of El Simon, and Villagran (P. D. Hurd)]. Bates (1885) has also recorded the species from Oaxaca and Playa Vicente.

Euryptera lateralis var. *flavatra* Blatchley

Euryptera flavatra Blatchley, 1914, *Canadian Ent.*, 46: 92.

Euryptera lateralis flavatra Knull, 1954, Ohio Jour. Sci., 45 : 129.

E. flavatra Blatchley was synonymized with *E. lateralis* by Hopping (1937), treated as a subspecies of *lateralis* by Knull (1954). I have seen material from Jacksonville, Tarpon Springs, Leesburg, Gainesville and Enterprise, Florida, mostly taken during March, and from Jacala, Hidalgo, Mexico, 4500 ft. elevation, July 5, 1939 (R. Haag, Museum of Comparative Zoology). The type is from Dunedin, Florida.

Euryptera chihuahuae Bates

Euryptera chihuahuae Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5: 285.

The type of this species is a male, not a female, as supposed by Bates. A female from Arroyo Mesteno, Sierra del Nido, elevation 7,600 feet, July 11, 1959 (W. C. Russell) has shorter and heavier antennae.

Euryptera huachucae Schaeffer

Euryptera huachucae Schaeffer, 1905, Mus. Brooklyn Inst. Arts Sci.; Sci. Bull., 1: 134; Hopping, 1937, Nat. Mus. Canada, Bull. 85: 284; Knull, 1954, Ohio Jour. Sci., 54: 129.

E. huachucae is very close to *E. chihuahuae*, and in the absence of a series of topotypical material of the latter, the status of the two names is difficult to determine. What I take to be both forms are represented in material from Cochise County, Arizona (California Academy of Sciences).

Euryptera longipennis Bates

Euryptera longipennis Bates, 1885, Biologia Centrali-Americana, Coleoptera 5: 286.

I have seen only the type of this distinctive species, from Ciudad Durango, elevation 8100 feet.

Euryptera patricia Bates

Euryptera patricia Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5: 286, pl. 20, fig. 14.

Euryptera princeps Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5: 286, pl. 20, fig. 11 (New Synonymy)

The type of *E. patricia* from Cordova, Mexico (Sallé), is a female, that of *E. princeps* from Volcan de Chiriqui, Panama, a male. Aside from differences in coloration, a common sex feature in *Euryptera*, the other differences are apparently sexual also, the male being more elongate with the pronotum and base of elytra narrower. A female from Chiriqui, Panama, in the Naturhistoriska Riksmuseet, Stockholm, appears to be typical of *E. patricia*, thus eliminating geographical reasons for regarding the two as representing separate species. *E. patricia* is distinctly lyciform.

Euryptera sericea Bates

Euryptera sericea Bates, 1885, Biologica Centrali-Americana, Coleoptera, 5: 285.

The type, if a male, has unusually heavy antennae for that sex, contributing to its lycid-like appearance. It is from Volcan de Chiriqui, Panama, elevation 4,000-6,000 feet.

Euryptera mimula Bates

Euryptera mimula Bates, 1885, Biologica Centrali-Americana, Coleoptera, 5: 285.

E. mimula Bates is the same size and form and expresses the same dichromatism in the two sexes as *Ophistomis xanto* Bates.

***Euryptera spinifera* Linsley, new species**

FEMALE Form moderately robust; integument shining, yellow, pronotum and elytra rufo-testaceous, the latter with apices black, eyes, antennae except base of scape, apex of clypeus, labrum, mandibles at middle, apices of femora, anterior tibiae at apex, intermediate and posterior tibiae and apices of second and third segments of intermediate and posterior tarsi black.

HEAD Clothed with short, erect, golden hairs, frons finely punctate, the punctures separated by several diameters, erect hairs longer at sides below antennal insertions, clypeus more coarsely punctate, the punctures separated by a diameter or less, vertex subcontiguously punctate; antennae reaching beyond middle of elytra, first four segments subcylindrical, finely punctate, clothed with suberect golden or brownish hairs (depending upon angle of light), with longer, coarser hairs at apex, segments five to eleven flattened but not serrate, more finely, densely punctate, more finely, densely clothed with shorter golden pubescence, with successively fewer long, coarse hairs at apex of segments five to seven than at apex of third and fourth segments, scape more than one-third longer than third segment, third segment barely longer than fourth but distinctly shorter than fifth, segments five to ten gradually decreasing in length. **PRONOTUM.** One and one-fifth times as

wide at base as long, apex nearly half as broad as width at middle, a little more than one-third as broad at base, posterior angles produced, surface moderately finely, closely punctate, each puncture bearing a posteriorly directed, recurved, coarse golden hair, the hairs well separated and not obscuring the surface; scutellum similarly clothed but more finely punctate; prosternum subglabrous; metasternum, abdomen, and femora punctate much like the dorsal surface and similarly clothed; apical angles of abdomen spiniform. ELYTRA. A little more coarsely punctate than pronotum and uniformly clothed with somewhat longer hairs which become black over the black apices which cover a little less than one-fifth of the total length; apices obliquely and feebly sinuately truncate; outer angle prominently and acutely dentiform. Length 10 mm.

HOLOTYPE female (Museum of Comparative Zoology, Harvard University) from Barro Colorado Island, Panama Canal Zone, July 14, 1924 (N. Banks).

This species is somewhat suggestive of *E. mimula* Bates, but differs in the more robust form, the more strongly produced lateral angles of the pronotum, and the much more similar pronotal and elytral punctation and pubescence. From *E. patricia* Bates, which also has the posterior pronotal angles produced, it differs in the more evenly convex elytra without longitudinal sulci and the less fine punctation and less dense pubescence of the dorsal surface. From both species it differs in details of coloration, most notably in the absence of a median longitudinal black line on the pronotum, and also in the spinose abdominal apex.

***Euryptera flammata* Linsley, new species**

FEMALE Form robust; integument black, pronotum and elytra red. HEAD. Elongate, distance between eye and base of mandibles about twice as long as basal width of mandibles; antennal tubercles and sides of face below them finely, densely punctate, clothed with appressed golden pubescence which becomes longer on vertex and on upper eye margins, triangular area at base of clypeus almost impunctate, punctures becoming large and subcontiguous toward apex, labrum also coarsely punctate; antennae with segments one to four shining, moderately finely punctate, clothed with suberect, coarse black hairs, segments five to eleven dullish, minutely punctate, more finely, densely pubescent. PRONOTUM. Campanulate, sides feebly narrowed behind middle, basal angles acute, prolonged, disk moderately coarsely, subcontiguously punctate except for a short longitudinal ridge behind middle; scutellum finely, densely punctate, thinly pubescent; prosternum finely punctate and pubescent at middle; metasternum and abdomen more coarsely punctate, thinly pubescent. ELYTRA. More finely and less densely punctate than pronotum, clothed with moderately long, suberect reddish hairs which are shorter at base, apices sinuate-truncate, outer angle dentiform. Legs densely punctate. Length approximately 14 mm.

HOLOTYPE female (Coleccion Entomologica, Oficina de Estudios Especiales, S.A.G., Mexico City) from Cuernevaca, Morelos, Mexico, July 8, 1957, "sobre arbol-mango" (Wm. W. Gibson).

This species resembles *E. ignita* Schaeffer in size, form, and general coloration, differing in having the head and ventral surface black, the vertex, and the upper eye margins densely clothed with long appressed golden pubescence and the elytral apices sinuate-truncate with the outer angle dentiform.

Euryptera cruenta Martin

Euryptera cruenta Martin, 1930, Pan-Pacific Ent., 7: 70, ♀ (?).
Euryptera cruneta Knull, 1954, Ohio Jour. Sci., 54: 129.

In the type of this species, a female from the Huachuca Mts., Arizona, the head and its appendages are black, except the apex of the clypeus and the mouth-parts which are largely testaceous. The pronotum and elytra are dull sanguineous, the scutellum and ventral surface black.

Euryptera sabinoensis Knull

Euryptera sabinoensis Knull, 1954, Ohio Jour. Sci., 54: 129.

This species is described in the female as reddish brown throughout, with the elytra opaque, and the tips of the mandibles, eyes, antennae, tips of femora, tibiae and tarsi dark brown to black. The type specimen was captured in Sabino Canyon, Santa Catalina Mountains, Arizona.

Euryptera ignita (Schaeffer)

Leptura ignita Schaeffer, 1908, Mus. Brooklyn Inst. Arts Sci., Sci. Bull., 1: 341.

Cyphonotida ? ignita Leng, 1920, Catal. Coleoptera Amer. No. of Mexico, p. 273.

Euryptera ignita Hopping, 1937, Nat. Mus. Canada, Bull. 85: 27;
Knull, 1954, Ohio Jour. Sci., 54: 129.

Euryptera ignita is a bright red species with the antennae black and the apex of the femora and tibiae, tarsi, and ventral surface brownish or piceous. It differs from *sabinoensis* in the shining elytra which are much more finely punctate than the pronotum.

Euryptera unicolor Bates

Euryptera unicolor Bates, 1892, Trans. Ent. Soc. London, 1892: 159, pl. 6, fig. 3.

The type specimen, from Tepetlapa, Guerrero, elevation 3000 ft., is apparently a male. In coloration it is an eurypteran counterpart of *Ophistomis pallida* Bates.

Euryptera breviceps Linsley, new species

MALE Form moderately robust; integument shining, yellowish, head and pronotum slightly rufo-testaceous, antennae black, apices of femora (narrowly) and tibiae (more broadly) and tarsi piceous. HEAD. With upper frons and vertex dullish, finely, densely punctate, clypeus shining, more coarsely punctate; antennae with first four segments cylindrical, shining, moderately finely punctate, thinly clothed with moderately short, coarse, suberect hairs, segments three to ten flattened, dull, very finely, densely punctate and minutely pubescent, eleventh segment about one and one-half times as long as tenth, appendiculate. PRONOTUM. Campanuliform, sides slightly emarginate behind middle, posterior angles subacute, not prolonged, disk moderately, coarsely, closely punctate except for a narrow polished line at middle, pubescence moderately short, subappressed, golden; scutellum finely punctate, thinly pubescent; prosternum polished, finely, sparsely punctate, meso- and metasternum finely, densely punctate, coxae of pro-, meso- and metasterna densely punctate, legs densely punctate. ELYTRA. Much more finely punctate than pronotum, rather densely clothed with suberect golden hairs which do not obscure the surface, apices broadly rounded to the external angle which is scarcely dentate. Length, approximately 13 mm.

HOLOTYPE male (California Academy of Sciences) from the Huachuca Mts., Arizona, July 17 (G. Beyer).

Although *E. breviceps* occurs in the same area as *E. ignita* (Schaeffer) and has been regarded as a color variant of that species, the structure of the head is so different, being very much shorter, with the distance between the lower margin of the eye and the base of the mandible less than the basal width of the mandible, that it seems unlikely that they can be forms of the same species.

MIMIPTERA Linsley, new genus

Form elongate, depressed, elytra expanded apically. Head moderately elongate; eyes convex, strongly emarginate at middle; antennae reaching to about middle of elytra, third and fourth segments each shorter than fifth, clothed with moderately long, suberect hairs, fifth to tenth segments subequal in length, expanded and minutely pubescent, eleventh segment more cylindrical. Pronotum campanuliform, lobed at base, longitudinally impressed on midline; prosternum with anterior coxae small, not exerted above level of intercoxal process, cavities acutely angulate externally; intermediate coxal cavities open to epimera. Elytra flattened, expanded beyond middle, densely fringed with hair, surface with obtuse longitudinal carinae and longitudinal sulcae, most evident apically; apices broadly truncate, both the sutural and external angles spinose. Abdomen with a stout spine on each side at lateral apical margin.

Type of genus: *Euryptera fulvella* Bates.

This genus differs at once from *Euryptera* in the small anterior coxae, which are not exerted and do not project above the intercoxal process.

Mimiptera fulvella (Bates)

Euryptera fulvella Bates, 1885, Biologia Centrali-Americana, Coleoptera, 5: 286, pl. 20, fig. 12.

Euryptera planicoxis Bates, 1892, Trans. Ent. Soc. London, 1892:159, pl. 2, fig. 5. (New Synonymy).



FIG. 1. *Mimiptera costaricensis* (Melzer).

The two types are from Panama (San Feliz and Chiriqui) and essentially identical. This species is fulvohraceous with the antennae, the mid-line of the pronotum, and sometimes the legs more or less blackish. It resembles a small pale lycid.

Mimiptera costaricensis (Melzer)

(Figure 1)

Euryptera costaricensis Melzer, 1935, Arch. Inst. Biologia Vegetal, 2(2): 182.

Two specimens in the collection of the U.S. National Museum in Washington from San Jose, Costa Rica appear to be refer-

able to *M. costaricensis*. These are a little broader apically than *M. fulvella* and differ in coloration, the elytra having a broad ante-median black band and the apices broadly black, providing a *Calopteron*-like color pattern.

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References

- BATES, H. W. 1880-85. Longicornia. *Biologia Centrali-Americana, Insecta Coleoptera*, 5: 1-435, 505-525, pls. 1-25.
- . 1892. Additions to the Longicornia of Mexico and Central America, with remarks on some of the previously-recorded species. *Trans. Ent. Soc. London*, 1892: 143-183, pls. 5-7.
- BELON, R. P. 1897. Remarques sur le genre *Euryptera* Serv., du groupe des Lepturides et description d'une espèce nouvelle de Bolivie. *Ann. Soc. Ent. Belgique*, 41: 339-343.
- BLATCHLEY, W. S. 1914. Notes on the winter and early spring Coleoptera of Florida, with descriptions of new species. *Canadian Ent.*, 46: 88-92.
- HOPPING, R. 1937. The Lepturini of America north of Mexico. Part II. Canada Dept. Mines and Resources, Nat. Mus. Canada, Bull. 85: (Biol. Ser. No. 22): 1-42.
- KNULL, J. A. 1941. Nine new Coleoptera. *Ohio Jour. Sci.*, 41: 381-388.
- . 1954. A new *Euryptera* with notes on other Cerambycidae. *Ohio Jour. Sci.*, 54: 129-130.
- MARTIN, J. O. 1930. Two new Coleopterous insects from Arizona. *Pan-Pacific Ent.*, 7: 70-72.
- MELZER, J. 1935. Novos Cerambycideos do Brasil, da Argentina e de Costa Rica. *Arch. Inst. Biol. Vegetal*, 2(2): 173-205.
- SCHAEFFER, C. 1908. List of the Longicorn Coleoptera collected on the Museum expeditions to Brownsville, Texas, and the Huachuca Mts., Arizona, with descriptions of new genera and species and notes on known species. *Mus. Brooklyn Inst. Arts Sci., Sci. Bull.*, 1: 325-352.